

TDB-ACC-NO: NB8406827

DISCLOSURE TITLE: Integral Power Resistors for Aluminum Substrate

PUBLICATION-DATA: IBM Technical Disclosure Bulletin, June 1984, US

VOLUME NUMBER: 27

ISSUE NUMBER: 1B

PAGE NUMBER: 827

PUBLICATION-DATE: June 1, 1984 (19840601)

CROSS REFERENCE: 0018-8689-27-1B-827

**DISCLOSURE TEXT:**

A sheet of thin film resistor material is used to provide the power resistors in a packaging technology using a laminate substrate of aluminum and polyimide. This technique allows automated manufacture of resistive components with low temperature processed substrate materials. The resistor material is sandwiched between a copper conductor sheet and a laminate substrate and etched to the proper resistor value and conductor pattern. By making the laminate substrate polyimide, or another suitable dielectric, and then attaching it to an aluminum base, power supply or other high power circuitry and all power and other resistors are fabricated at one time. The power dissipation capability is limited only by the ability of the aluminum base to dissipate heat. The aluminum base may be an aluminum plate or powdered metal.

**SECURITY:** Use, copying and distribution of this data is subject to the restrictions in the Agreement For IBM TDB Database and Related Computer Databases. Unpublished - all rights reserved under the Copyright Laws of the United States. Contains confidential commercial information of IBM exempt from FOIA disclosure per 5 U.S.C. 552(b)(4) and protected under the Trade Secrets Act, 18 U.S.C. 1905.

**COPYRIGHT STATEMENT:** The text of this article is Copyrighted (c) IBM Corporation 1984. All rights reserved.

